

**CDC *Vital Signs* Town Hall Teleconference on
Asthma in the United States
Transcript**

May 10, 2011
2:00pm – 3:00pm EST

Coordinator: Welcome and thank you for standing by. At this time all participants are on a listen-only mode. I do want to let parties know that this call is being recorded. If you have any objections you may disconnect at this time. Now I would like to turn the call over to Dr. Judy Monroe, Director of the Office for State, Tribal, Local and Territorial Support. Thank you.

Dr. Judy Monroe: Well thank you and good afternoon everyone. So as the operator said, I'm Dr. Judy Monroe. And I direct the Office for State, Tribal, Local and Territorial Support here at CDC. And I want to welcome all of you to CDC's May *Vital Signs* Town Hall Teleconference on asthma.

Asthma is a very serious, life-long disease that affects more than 25 million U.S. residents that are living with asthma and have to manage it every day. The number of people affected by asthma is growing every year. And the burden of asthma falls not only on the individuals with asthma but also falls on our schools, our families, our workplaces, our healthcare system, our cities and our states.

This month's *Vital Signs* report highlights the role each can play in reducing the burden of asthma, and we are fortunate to have many of these groups represented on the call today.

Addressing this issue demands a comprehensive and coordinated public health approach. The asthma guidelines developed by NIH's National Asthma Education and Prevention Program inform this approach and serve as the foundation for what state asthma programs can do. These guidelines focus on

assessment of severity and patient control, education on self-management, environmental controls, and appropriate medications.

During the next hour we're going to have the opportunity to share strategies, lessons learned and success stories. We can take this information and then together we can tackle this issue and have a meaningful impact on the health nationwide.

So without further delay I'm going to turn the teleconference over to Lorine Spencer from the Knowledge Management Branch here in OSTLTs who's going to introduce our speakers and facilitate the discussion portion of today's meeting.

Lorine Spencer: Thank you Dr. Monroe. Good afternoon and thank you for joining us.

Before we get started I want to take a moment to remind everyone about a number of helpful links that you can find on the OSTLTs' *Vital Signs* website. To get there, go to www.cdc.gov/ostlts—that's O-S-T-L-T-S—and click twice at the Town Hall tab that's in the flash module at the bottom - or the top of the page rather and you'll be able to get into the *Vital Signs* website.

In the resources section you'll find a link to biographies for each of our presenters today, PowerPoint presentation so you can follow along, and a way to provide feedback. I encourage you to take a few moments to let us know your thoughts on today's call. The recording and transcript of today's meeting will also be available at this site later this week.

Now it's my pleasure to introduce our speakers. I'm going to introduce them all at one time and then each speaker will hand it off to the next one.

Joining us today to provide a summary of this month's *Vital Signs* report is Dr. Hatice Zahran, epidemiologist in the Division of Environmental Hazards and Health Effects within CDC's National Center for Environmental Health. In this role, she's responsible for systematic management, analysis and interpretation of asthma surveillance data.

Our second speaker is Peggy Gaddy, coordinator of the Missouri Asthma Prevention and Control Program. She worked with state-wide partners to develop and implement the state plan *Putting Excellent Asthma Care Within Reach*, which focus on school nursing services, medical care quality, health disparities, self-management education, and indoor air quality.

Our last presenter today is Charlotte Collins. She will highlight the work she's been doing as vice president of policy and programs at the Asthma and Allergy Foundation of America. She serves as principal investigator of the foundation's asthma education program and authors the annual *State Honor Roll or Asthma and Allergy Policies for Schools*.

So Dr. Zahran, welcome and if you will start us off.

Dr. Hatice Zahran: Thank you. Good afternoon. I will talk about this month's *Vital Signs* report. The report includes information on asthma prevalence, health outcomes and asthma management. Next slide please.

Asthma is on the rise despite improvement in outdoor air quality and decrease in cigarette smoking and secondhand smoke exposure, which are commonly known risk factors for asthma. Asthma affects about 25 million people, including 7 million children.

As with any chronic disease, asthma imposes a burden—growing burden—on society in terms of morbidity, quality of life and healthcare costs. The

estimated total cost of asthma to society, including medical expenses, loss of productivity resulting from missed school or workdays, and premature death, was \$56 billion in 2007. Also, medical costs associated with asthma were about \$3,300 per person per year during 2002–2007. Next slide.

Asthma is more prevalent among children (especially boys), among women, African Americans, and among those reporting income below the federal poverty level. Next slide please.

Since 2001, a rising trend in asthma prevalence was observed across all demographic subgroups, and the differences in asthma prevalence among subgroups persisted over the years. However, a greater rise in asthma prevalence was observed among African-American children, African-American men, and non-Hispanic white woman. Next slide please.

Multiple factors can influence asthma control and management. Poor control of asthma continues to be associated with increased emergency department visits, hospitalization, and loss of productivity, such as missed school or work days.

Healthcare access is an important factor in effective asthma management. Although most persons with asthma have health insurance, about 89%, more uninsured persons with asthma could not afford to buy prescription medications and fewer reported seeing a specialist or primary care physician about their asthma than those insured.

Patient education is another important factor in effective asthma management. Patient education concerning self-management of the disease and its attacks is one of the four key components of effective asthma management listed in the National Institute of Health guidelines that were developed by National Asthma Education and Prevention Program. Even so, such recommended

educational activities were not reported widely and did not meet the Healthy People 2010 target for asthma-related objectives. For example, the guidelines recommend that every person with asthma, especially those with moderate to severe asthma, have an asthma action plan. Yet only one-third of adults and children reported having such a plan.

Home-based environmental interventions also play a role in asthma management. Multi-trigger, multi-component home-based environmental interventions are known to improve asthma symptoms and to reduce missed school days among children. Yet only half of children or caregivers were advised to change conditions at school or home to reduce environmental triggers. Next.

In conclusion, asthma is on the rise. The reason for the rise in asthma prevalence and the rate variation among demographic subgroups are not fully understood. And it is likely that multiple factors play contributing factors.

Although asthma cannot be cured at present, symptoms can be controlled with appropriate medical treatment, self-management education, and by avoiding exposure to environmental allergens and irritants that can trigger an asthma attack.

Given that getting people to manage their asthma effectively is key for better health outcomes, healthcare providers and public health officials at the local, state and national level should continue to develop programs that empower persons with asthma to manage their disease effectively, to address gaps in access to care, and to support preventive measures that can improve health outcomes. Next slide.

This is my contact information. Thank you. Peggy will be next. Thank you.

Peggy Gaddy: First of all I'd like to say it is an honor to be invited to share in the highlights of the Missouri asthma program. Of course ten minutes is not going to give us a lot of time to do that, so if you would like more detailed information on any of the slides presented today, you have my contact information. So feel free to call or email me at any time. Next slide.

In Missouri, prevalence statistics do not tell the full story. Health service utilization, such as hospitalization and ER visits, are used as proxy indicators of disease severity and identifying public health opportunities to improve asthma control. For population subgroups, hospitalizations correlate with ER visits although they tell a different story. It is important to note that African Americans show significantly higher rates across populations; especially note the significance in the 1 to 4 year old age group.

Asthma in the urban setting is an established public health problem. It has been well studied and documented nationally. However, asthma is not exclusively a herb—an urban public health problem. Our surveillance data guided us to appreciation—to an appreciation of the problem in rural communities. The MAPCP [Missouri Asthma Prevention and Control Program] developed a balanced approach to addressing asthma in Missouri, urban and rural, noting that the same strategies may not necessarily work equally in both.

One key point in the Medicaid data is that ICS [inhaled corticosteroids] adherence is low despite having insurance and very low co-pay. Another key point is that ER visits are down 7.4% for asthma, while overall ER visits are up 23%. This may be an indicator of the success of some of our local and state-wide interventions. Next please. And next - and the next slide after that.

We commissioned a study in partnership through school nurses to ascertain the degree of disabling asthma in Missouri to help identify the most difficult

and costly cases in rural communities. The study illustrated the extent to which asthma was a problem in these communities. There may be less cases, but asthma control may be worse. Next slide.

ESSENCE gives us real-time cases of asthma as the chief complaint through participating hospitals. Lines represent state versus one region of the state. Next slide.

All pharmacy plans are now under the state Medicaid program. This will give us information on ICS adherence rate as an outcome.

The Missouri Health Initiative is a community-based, non-profit initiative that brings together claims data—that's from self-insured, commercial health plans and Medicaid. It covers about one-third of the state. An example of information we've received is that failure to follow-up with a physician within 90 days following an ER visit occurred 77% of the time and failure to obtain ICS occurred 76% of the time.

I'm happy to answer questions about any of the data collection analysis items listed on the slide, but I just want to highlight two now.

First, we're developing an initiative where we can link Medicaid claims data and school data. This will allow us to note the changes in absenteeism when interventions that improve ICS adherence decrease ER utilization and increases in non-emergent physician offices are implemented.

Second, we're working with MPCA [Missouri Primary Care Association], the statewide organization for FQHCs [Federally Qualified Health Centers] and rural health clinics, to create an EPR 3 [Expert Panel Report 3] compliant electronic medical record that will allow us the ability to assess quality of

asthma care for un- and underinsured. Medicaid and MPCA are two ways we have observed great benefits of our partnerships in Missouri. Next slide.

Building partnerships is time intensive and not all of them work. The strategy for building strategic partnerships has worked well in Missouri. Some of our key partners are the school health programs, childcare health consultant programs, Missouri School Boards' Association, and Center for Local Public Health [Services], which represents statewide networks of education and health professionals and public health departments. Another key partner has been the Missouri Foundation for Health that is investing a large amount of resources to implement community asthma initiatives. As you'll see our partnership to improve asthma care involves inter-disciplinary sharing, coordination, intervention, priorities and relevance.

At the bottom of the screen, you'll note that CDC has invested \$3.4 million in the MAPCP since 2001. It has helped to produce a greater than \$20 million investment from our partners in activities aligned with the state plan *Putting Excellent Asthma Care Within Reach*. Next slide.

We believe that local plus statewide equals sustainable interventions. Systems thinking is very important in Missouri. Operating micro and macro systems simultaneously is crucial for sustainability.

In 2008, we created the *Framework for Community-based Approaches to Improving Asthma Care for Children*. It is a simple, to the point, one-page summary. It sets goals and interventions for integrating efforts in five areas: schools, home environmental assessments, primary care providers, hospitals and emergency rooms, and childcare.

Some of the key concepts that we have is we believe we can demonstrate success at a local level and any community can show improvement. Next slide

please. We have shown success at the local level. One is in Kennett, the other is in Springfield, Missouri. We believe that institutionalization does not occur unless there are real people working on it. Next slide. Experience, testimonials and data-driven expansion of successful ideas is proven important. We also identify statewide policy change opportunities through community-based work. We have statewide workforce development procedures produces—our statewide workforce development produces system level change. Examples are LPHA [Local Public Health Agencies] and school nurses. And we believe in cultivating local leadership such as our Asthma School Nursing Award and our Missouri Asthma Coalition. Next slide.

The MAPCP interventions are designed to support sustainable asthma care improvements focusing on workforce development and community-based leadership. The three points are environment, medical and self-management. The MAPCP has developed a portfolio of interventions to support these points. Asthma Ready touches medical, home, childcare, schools and community. And school interventions bridge self-management, medical, as well as in environmental. Our Early Childhood Asthma Initiative bridges issues with the environment and self-management for young children through childcare, health consultants and LPHA. Next slide.

In summary, the state asthma program has the unique opportunity to bring together the best of the best to address asthma in a multipronged approach. Behind the plans and interventions are people who share a common vision for asthma care and prevention. The MAPCP team believes that

- EPR3 is the best evidence available.
- Evaluation is a quality improvement strategy.
- Health disparities can be reduced.
- Relationships matter to develop and sustain successful intervention.
- Data guides and innovation drives impactful work.
- Return-on-investment is measurable.

We believe that an enviroclinical approach which integrates environmental and clinical approaches to improve asthma care. The reality is that medical interventions do not work as well if the environment is not taken into consideration. And to take a strictly environmental approach does not work without medical intervention and medication adherence.

Our next speaker is Charlotte Collins.

Charlotte Collins: Good afternoon. I'm so pleased that CDC's *Vital Signs* focus on World Asthma Day 2011 is asthma. My hopes for *Vital Signs* are for an energized conversation about asthma with talk about asthma prevalence for all Americans and for special populations like children and African Americans; talk about asthma deaths – too many deaths occur and we really don't, especially public officials, recognize asthma severities; talk about the African-American children who are four times more likely to die from asthma; and talk about the cost of asthma and the economic benefits of appropriate, effective asthma interventions.

Since last Tuesday's *Vital Signs* release we've seen a lot of that. My talk this afternoon will focus on the quiet gains we have made because of community and state interventions like the program that Peggy just described and other programs fueled by CDC, particularly the National Asthma Control Program. Next slide.

This slide depicts four components of asthma control. From the public health perspective the goal of asthma control is to reduce emergency visits and hospitalizations, school and work absences, and deaths and to improve quality of life. This chart depicts four components of asthma control that include treatment and right medications like inhaled corticosteroids, but this depiction also recognizes the important role of other asthma control components: monitoring and assessment, self-management education, and environmental

control. The environment including indoor spaces like the home, school and workplace and outdoor environment—wherever people work, learn and live. Next slide.

Asthma interventions improve health outcomes and reduce medical costs. I can point to a number of statements that underscore the benefit of asthma interventions in dollars and cents, and I've chosen the four listed on this slide:

- Proper asthma management has the potential to save at least 25% of total asthma costs or close to \$5 billion nationwide annually.
- Asthma interventions can save up to \$36 in healthcare costs and workdays lost for every dollar spent.
- The annual Medicaid spend on asthma medical costs ranges from \$31 in Hawaii to - I'm sorry, \$31 million in Hawaii to up to \$158 million in Washington state.
- And this last one I really like that - because that - given all the talk about Medicaid reductions and the burdens that states are feeling right now, I think it's really helpful to know that in the state of New York as an example the average Medicaid cost to treat a single asthma episode is \$12,000. Okay, next slide.

The National Asthma Control Program Impacts:

- The National Asthma Control Program funds ten urban school districts that implement school-based asthma programs with an average award of \$200,000.
- The Asthma Analogy Foundation of America or AAFA trained 571 Head Start coordinators in 18 states to educate staff and parents of children with asthma.
- We disseminated asthma education materials for children, a program called *You Can Control Asthma* to Boys and Girls Clubs of America, asthma camps, asthma educators, and collations nationwide.

The National Asthma Control Program also supports partnerships with other national non-governmental organizations like the American Lung Association and Allergy and Asthma Network Mothers of Asthmatics. These organizations offer services that support asthma education for patients and professionals.

States and communities can benefit directly from the National Asthma Control Program even if they are not funded partners. For example, the Asthma Callback Survey is a national surveillance activity that unlocks a treasure trove of information about the real-life experiences of people with asthma. Before the National Asthma Control Program supported this survey, none of this information was available to states. Now 40 states use it to plan and organize asthma control efforts.

These are examples of the National Asthma Control Program's distinct approach, which puts expert established asthma treatment guidelines into practice in community settings and incorporates self-management and the environment.

For every dollar of National Asthma Control Program funding, 13 cents is spent on surveillance and 18 cents is spent on interventions. The remaining 69 cents is spent on partnerships. Partnerships target states where asthma patients live. Eighty-four percent of Americans with asthma live in states that have CDC-funded asthma programs. From 2000 to 2007, 34 states and two territories received funding through their state health departments. These states and territories as a group realized a 10% decline in the rate of asthma-related hospitalizations. These partnerships, across states and with national partners, support an array of activities that are as diverse as the states, territories, and organizations themselves, but the common thread is that these activities help people to control their asthma and avoid hospitalizations while leading them to lead healthier, more productive lives. Next slide.

I would like to end with some specific examples of partnership successes. Peggy discussed Missouri. To that I would like to add, related to Missouri, that the burden of children's asthma in Missouri is shocking. Peggy mentioned 10% of children across Missouri. I've heard that the number in the city of St. Louis is even worse, with one in five experiencing asthma. Thankfully the impact of partnership is impressive. And as she pointed out, Missouri partners have leveraged less than \$3 million of National Asthma Control Program funding to over \$20 million of asthma control activities or maybe she said \$3.4 million was leveraged into \$20 million of asthma control activities—whether it's \$3 or \$3.4, that's really impressive.

Missouri is not alone in its successes. The National Asthma Control Program funds Connecticut, which targeted asthma patients who rush into hospital emergency departments as their primary and expensive source of care. So Connecticut started educating patients in their homes, showing them how to self-manage their asthma and control environment triggers in their homes. The result, Connecticut dramatically reduced the number of emergency visits per patient from three visits to fewer than one visit in the six months following the program.

The National Asthma Control Program funds Illinois, which provides technical assistance to those who develop construction policies that reduce air pollution. Illinois partners with 140 organizations statewide, including Sinai's Westside Children's Asthma Partnership. It deploys asthma community health workers to train asthma patients directly. This program reports a 74% decrease in emergency department visits and increased asthma symptom-free days.

New York, where one in four Harlem children have asthma, shares asthma treatment guidelines to over 20,000 primary care providers and asthma specialists and developed user-friendly asthma—a user-friendly asthma guideline toolkit for primary care providers.

I'll close by saying that I've grown used to hearing researchers conclude their presentations by saying that more research is needed. That is certainly the case with asthma too. And many exciting announcements recently portend new treatments that will improve and extend life for asthma patients.

But I hope that you will leave this *Vital Signs* Town Hall meeting reenergized about the successful models that CDC, states, and community support that offer a win-win for patients and communities.

Now I'd like to turn the program over to Lorine Spencer.